

=> fil reg

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STRUCTURE FILE UPDATES: 7 FEB 2011 HIGHEST RN 1262277-39-3
DICTIONARY FILE UPDATES: 7 FEB 2011 HIGHEST RN 1262277-39-3

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TSCA INFORMATION NOW CURRENT THROUGH June 26, 2010.

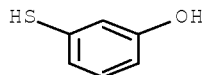
Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

=> d ide can tot l17

L17 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2011 ACS on STN
RN 40248-84-8 REGISTRY
ED Entered STN: 16 Nov 1984
CN Phenol, 3-mercapto- (CA INDEX NAME)
OTHER NAMES:
CN 3-Hydroxybenzenethiol
CN 3-Hydroxyphenylmercaptan
CN 3-Hydroxythiophenol
CN 3-Mercaptophenol
CN m-Hydroxybenzenethiol
CN m-Mercaptophenol
CN Monothioresorcinol
MF C6 H6 O S
CI COM
LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, IFICDB, IFIPAT, IFIUDB,
REAXYSFILE*, TOXCENTER, USPAT2, USPATFULL, USPATOLD
(*File contains numerically searchable property data)

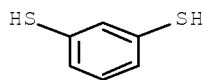


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

124 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
124 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 154:30410
 REFERENCE 2: 154:11144
 REFERENCE 3: 153:643216
 REFERENCE 4: 153:232372
 REFERENCE 5: 153:204023
 REFERENCE 6: 152:568265
 REFERENCE 7: 152:357724
 REFERENCE 8: 152:287392
 REFERENCE 9: 152:191792
 REFERENCE 10: 152:170754

L17 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2011 ACS on STN
 RN 626-04-0 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN 1,3-Benzenedithiol (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN m-Benzenedithiol (6CI, 7CI, 8CI)
 OTHER NAMES:
 CN 1,3-Dimercaptobenzene
 CN Dithioresorcinol
 CN Thioresorcinol
 MF C6 H6 S2
 CI COM
 LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, GMELIN*, IFICDB,
 IFIPAT, IFIUDB, REAXYSFILE*, SPECINFO, TOXCENTER, USPAT2, USPATFULL,
 USPATOLD
 (*File contains numerically searchable property data)
 Other Sources: EINECS**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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 12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 226 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 154:87830
 REFERENCE 2: 154:23127
 REFERENCE 3: 153:534422

REFERENCE 4: 153:510019
REFERENCE 5: 153:482258
REFERENCE 6: 153:382924
REFERENCE 7: 153:359490
REFERENCE 8: 153:265014
REFERENCE 9: 153:186957
REFERENCE 10: 152:530481

L17 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2011 ACS on STN

RN 108-46-3 REGISTRY

ED Entered STN: 16 Nov 1984

CN 1,3-Benzenediol (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Resorcinol (8CI)

OTHER NAMES:

CN 1,3-Dihydroxybenzene

CN 3-Hydroxyphenol

CN C.I. 76505

CN C.I. Developer 4

CN C.I. Oxidation Base 31

CN Developer O

CN Developer R

CN Developer RS

CN Durafur Developer G

CN Fouramine RS

CN Fourrine 79

CN Fourrine EW

CN m-Benzenediol

CN m-Dihydroxybenzene

CN m-Hydroquinone

CN m-Hydroxyphenol

CN m-Hydroxyphenol

CN m-Phenylenediol

CN Nako TGG

CN NSC 1571

CN Pelagol Grey RS

CN Pelagol RS

CN Redimix 401RAP60

CN Reso

CN Resorcin

CN Resorcinol 80

CN Rezorsine

CN Rodol RS

CN RS 11H

CN RS 11L

MF C6 H6 O2

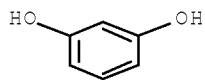
CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, ENCOMPAT, ENCOMPAT2, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, PIRA, PS, REAXYSFILE*, RTECS*, SPECINFO, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

19733 REFERENCES IN FILE CA (1907 TO DATE)

1862 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

19827 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 154:149050

REFERENCE 2: 154:144731

REFERENCE 3: 154:144728

REFERENCE 4: 154:141215

REFERENCE 5: 154:141214

REFERENCE 6: 154:141209

REFERENCE 7: 154:141208

REFERENCE 8: 154:141207

REFERENCE 9: 154:140696

REFERENCE 10: 154:139616

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 09:07:08 ON 08 FEB 2011

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FILE COVERS 1907 - 8 Feb 2011 VOL 154 ISS 7

FILE LAST UPDATED: 7 Feb 2011 (20110207/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2010

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2010

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the fourth quarter of 2010.

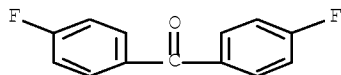
CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

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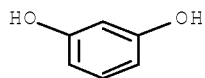
L68 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2011 ACS on STN
 AN 2006:1344078 HCAPLUS Full-text
 DN 146:229750
 TI Photochemically cross-linked poly(aryl ether ketone) rings
 AU Teasdale, Ian; Harper, Elizabeth C.; Coppo, Paolo; Wilson, Brian; Turner, Michael L.
 CS Organic Materials Innovation Centre (OMIC), School of Chemistry, The University of Manchester, Manchester, M13 9PL, UK
 SO Macromolecular Rapid Communications (2006), 27(23), 2032-2037
 CODEN: MRCOE3; ISSN: 1022-1336
 PB Wiley-VCH Verlag GmbH & Co. KGaA
 DT Journal
 LA English
 AB Macrocyclic Ph ether ketones were prepared via pseudo high dilution condensation. Irradiation of these rings with UV light in a solution containing iso-Pr alc. as hydrogen donor resulted in a photo-induced reduction of benzophenone to benzopinacol and the formation linked macrocycles. These rings can be heated to undergo ring-opening polymerization and produce a polymer network or they can be added to a polycondensation reaction to prepare poly(ether ether ketones) with variable degrees of crosslinking.
 CC 35-8 (Chemistry of Synthetic High Polymers)
 IT 27400-53-9DP, 4-Fluoro-4'-hydroxybenzophenone homopolymer, cyclic derivs. 29658-26-2DP, 4,4'-Difluorobenzophenone-hydroquinone copolymer, cyclic derivs. 124950-77-2DP, Catechol-4,4'-difluorobenzophenone copolymer, cyclic derivs.
 RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
 (preparation of photochem. crosslinked poly(aryl ether ketone) rings)
 IT 124950-77-2DP, **Catechol-4,4'-difluorobenzophenone copolymer, cyclic derivs.**
 RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
 (preparation of photochem. crosslinked poly(aryl ether ketone) rings)
 RN 124950-77-2 HCAPLUS
 CN Methanone, bis(4-fluorophenyl)-, polymer with 1,3-benzenediol (CA INDEX NAME)
 CM 1
 CRN 345-92-6
 CMF C13 H8 F2 O



CM 2

CRN 108-46-3

CMF C6 H6 O2



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Ben-Haida, A	2000	10	2011	J Mater Chem	HCAPLUS
Chan, C	1986			US 4616056	HCAPLUS
Chen, M	1996	29	5502	Macromolecules	HCAPLUS
Ciamician, G	1900	33	2911	Chem Ber	
Ciamician, G	1901	34	1541	Chem Ber	
Cohen, W	1920	39	243	Rec Trav Chim	HCAPLUS
Colquhoun, H	2003	13	1504	J Mater Chem	HCAPLUS
Gao, C	1995	36	4141	Polymer	HCAPLUS
Hodge, P	2005	16	84	Polym Adv Technol	HCAPLUS
Hu, W	2002	43	1405	Polym Prepr	HCAPLUS
Hunter, R	2001	11	736	J Mat Chem	HCAPLUS
Jonas, A	1993	26	2674	Macromolecules	HCAPLUS
Kunz, M	2002	43	410	Polym Prepr	HCAPLUS
Liu, X	2002	43	1288	Polym Prepr	HCAPLUS
Mercer, F	1997	38	707	Polymer	HCAPLUS
Mohanty, D	1984	25	19	Polym Prepr	HCAPLUS
Noiset, O	1997	30	540	Macromolecules	HCAPLUS
Paterno, E	1909	39b	415	Gazz Chim Ital	
Sasuga, T	2000	41	185	Polymer	HCAPLUS
Shah, B	2003	16	18	The Spectrum	HCAPLUS
Staniland, P	1989	5	492	Comprehensive Polyme	
Walker, K	1993	26	3713	Macromolecules	HCAPLUS

L68 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2011 ACS on STN

AN 2004:935246 HCAPLUS [Full-text](#)

DN 141:396494

TI Proton-conductive polymer compositions with good adhesion for
proton-conductive membranes in fuel cellsIN Kuroki, Takashi; Omi, Katsuhiko; Ishikawa, Junichi; Fujiyama, Akiko;
Takeda, Koji; Tamai, Masashi

PA Mitsui Chemicals Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 25 pp.

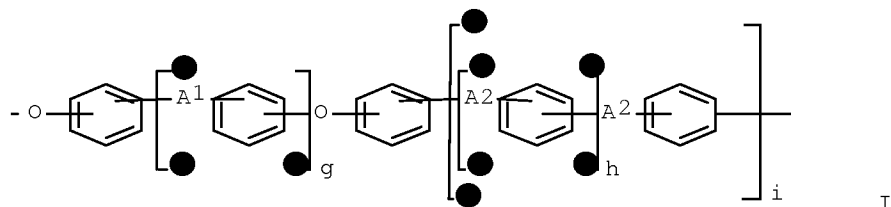
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004307629	A	20041104	JP 2003-102676	20030407
	JP 4360113	B2	20091111		
PRAI	JP 2003-102676		20030407		
GI					



AB The composition comprises (A) 60-10% aromatic polyether with flow starting temperature 100-220° having repeat unit I (A1, A2 = direct bond, -CH2-, -C(CH3)2-, -C(CF3)2-, -O-, -SO2-, -CO-; g, h, i = 0, 1) and (B) 40-90% proton acid-containing aromatic polyether. Thus, 2.0 parts polyaryletherketone powder prepared from 4,4'-difluorobenzophenone, resorcin and anhydrous sodium carbonate was mixed with 2.0 parts proton acid-containing polyaryletherketone powder obtained from 3,3'-carbonylbis(sodium 6-fluorobenzenesulfonate), bis(3-methyl-4-hydroxyphenyl)methane and anhydrous sodium carbonate in N-methyl-2-pyridone, applied to a glass plate and dried to give a film, which was proton-exchanged to form a proton conductive membrane showing ion conductivity (hot melt) 0.14 S/cm.

IPCI C08L0071-10 [I,A]; C08L0071-00 [I,C*]; H01B0001-06 [I,A]; H01M0008-02 [I,A]; H01M0008-10 [I,A]

IPCR C08L0071-00 [I,C*]; C08L0071-10 [I,A]; H01B0001-06 [I,A]; H01B0001-06 [I,C*]; H01M0008-02 [I,A]; H01M0008-02 [I,C*]; H01M0008-10 [I,A]; H01M0008-10 [I,C*]

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 52

IT Fuel cell electrolytes

Fuel cells

Plastic films

(proton-conductive polymer compns. with good adhesion for proton-conductive membranes in fuel cells)

IT 69777-44-2P 124949-92-4P 124950-77-2P 137024-96-5P 785802-31-5P
785802-36-0P 785802-38-2P

RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); PREP (Preparation); USES (Uses)

(proton-conductive polymer compns. with good adhesion for proton-conductive membranes in fuel cells)

IT 69777-44-2P 124949-92-4P 124950-77-2P 137024-96-5P

RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); PREP (Preparation); USES (Uses)

(proton-conductive polymer compns. with good adhesion for proton-conductive membranes in fuel cells)

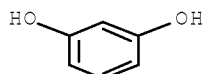
RN 69777-44-2 HCAPLUS

CN 1,3-Benzenediol, polymer with 1,1'-sulfonylbis[4-chlorobenzene] (9CI) (CA INDEX NAME)

CM 1

CRN 108-46-3

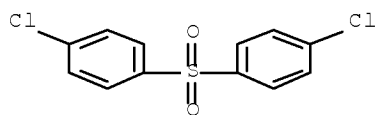
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CM 2

CRN 80-07-9

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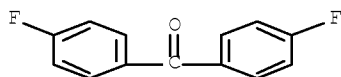
RN 124949-92-4 HCAPLUS

CN Methanone, bis(4-fluorophenyl)-, polymer with 1,3-benzenediol and 1,4-benzenediol (9CI) (CA INDEX NAME)

CM 1

CRN 345-92-6

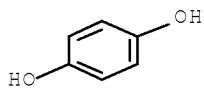
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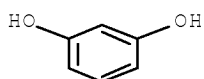
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CRN 108-46-3

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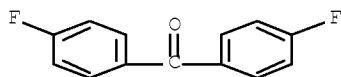
RN 124950-77-2 HCAPLUS

CN Methanone, bis(4-fluorophenyl)-, polymer with 1,3-benzenediol (CA INDEX NAME)

CM 1

CRN 345-92-6

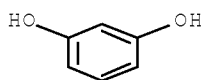
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CRN 108-46-3

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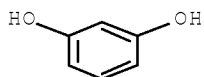
RN 137024-96-5 HCAPLUS

CN 1,3-Benzenediol, polymer with 4,4'-(1-methylethylidene)bis[phenol] and 1,1'-sulfonylbis[4-chlorobenzene] (9CI) (CA INDEX NAME)

CM 1

CRN 108-46-3

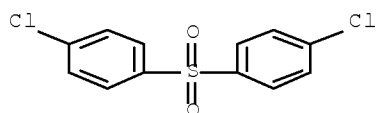
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CM 2

CRN 80-07-9

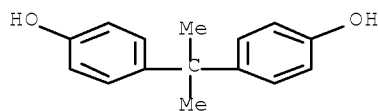
CMF C12 H8 Cl2 O2 S



CM 3

CRN 80-05-7

CMF C15 H16 O2



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L68 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2011 ACS on STN

AN 2004:857827 HCAPLUS Full-text

DN 141:352743

TI Polymer electrolyte membrane or gas diffusion electrode for fuel cells

IN Charnock, Peter; Devine, John Neil; Wilson, Brian

PA Victrex Manufacturing Limited, UK

SO PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DT Patent

LA English

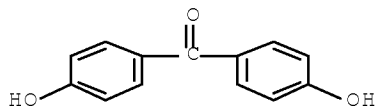
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PI	WO 2004088778	A2	20041014	WO 2004-GB1401	20040401
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	CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				
	GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,				
	LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,				
	NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,				
	TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,				
	BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,				
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	TD, TG				
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	AU 2004226638	B2	20100909		
	CA 2520650	A1	20041014	CA 2004-2520650	20040401
	EP 1614170	A2	20060111	EP 2004-725090	20040401
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	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
	IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
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	WO 2004-GB1401	W	20040401		

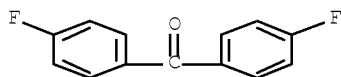
AB A polymer electrolyte membrane or gas diffusion electrode includes an ion-conducting polymeric material which includes moieties of formula -X-m-C₆H₄-X- which are substituted on average with more than 1 and 3 or fewer groups (e.g. sulfonate groups) which provide ion-exchange sites and hydrogen atoms of the moieties are optionally substituted, wherein each X in the moieties of formula are independently represent an oxygen or sulfur atom. The ion conducting polymeric material is suitably prepared by controllably sulfonating a polymeric material using about 100% sulfuric acid at 34° to

36°.

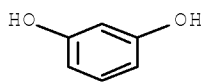
IPCI H01M0008-00 [ICM,7]
 IPCR B01D0071-00 [I,C*]; B01D0071-52 [I,A]; B01D0071-68 [I,A]; B01D0071-82 [I,A];
 C08G0065-00 [I,C*]; C08G0065-48 [I,A]; C08G0075-00 [I,C*]; C08G0075-23 [I,A];
 C08J0005-20 [I,C*]; C08J0005-22 [I,A]; H01M0004-86 [I,C*]; H01M0004-86 [I,A];
 H01M0008-10 [I,C*]; H01M0008-10 [I,A]
 CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
 Section cross-reference(s): 38
 IT 124949-97-9DP, sulfonated 124949-97-9P 775342-45-5DP, sulfonated
 775342-45-5P
 RL: DEV (Device component use); SPN (Synthetic preparation); PREP
 (Preparation); USES (Uses)
 (polymer electrolyte membrane or gas diffusion electrode for fuel
 cells)
 RN 124949-97-9 HCAPLUS
 CN Methanone, bis(4-fluorophenyl)-, polymer with 1,3-benzenediol and
 bis(4-hydroxyphenyl)methanone (CA INDEX NAME)
 CM 1
 CRN 611-99-4
 CMF C13 H10 O3



CM 2
 CRN 345-92-6
 CMF C13 H8 F2 O



CM 3
 CRN 108-46-3
 CMF C6 H6 O2

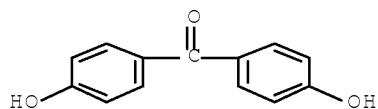


RN 775342-45-5 HCAPLUS
 CN Methanone, bis(4-fluorophenyl)-, polymer with 1,3-benzenediol,

bis(4-hydroxyphenyl)methanone and 4,4'-sulfonylbis[phenol] (9CI) (CA INDEX NAME)

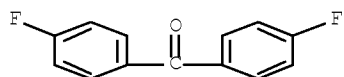
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CRN 611-99-4
CMF C13 H10 O3



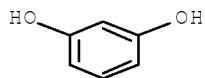
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CRN 345-92-6
CMF C13 H8 F2 O



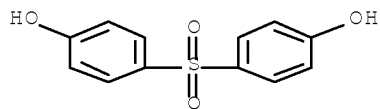
CM 3

CRN 108-46-3
CMF C6 H6 O2



CM 4

CRN 80-09-1
CMF C12 H10 O4 S



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
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=====+-----+-----+-----+-----+=====
Anon      |         |         |         |WO 0119896 A1      |HCAPLUS
Anon      |         |         |         |EP 0382440 A1      |HCAPLUS
Anon      |         |         |         |US 4273903 A       |HCAPLUS
Anon      |         |         |         |US 5362836 A       |HCAPLUS
OSC.G     1      THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

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L68 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2011 ACS on STN

AN 2004:757063 HCAPLUS Full-text

DN 141:280351

TI Polymer electrolyte material, polymer electrolyte parts,
membrane-electrode laminate, and polymer electrolyte fuel cell

IN Adachi, Shinya; Izuhara, Daisuke; Nakamura, Masataka; Ito, Nobuaki

PA Toray Industries, Inc., Japan

SO PCT Int. Appl., 147 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004079844	A1	20040916	WO 2004-JP2894	20040305
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2004269599	A	20040930	JP 2003-59569	20030306
	CA 2518414	A1	20040916	CA 2004-2518414	20040305
	EP 1619735	A1	20060125	EP 2004-717850	20040305
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
	CN 1757130	A	20060405	CN 2004-80006115	20040305
	CN 100364160	C	20080123		
	JP 2005174897	A	20050630	JP 2004-121470	20040416
	US 20060180796	A1	20060817	US 2005-548110	20050906
	US 7713449	B2	20100511		
PRAI	JP 2003-59569	A	20030306		
	JP 2003-116685	A	20030422		
	JP 2003-120115	A	20030424		
	JP 2003-386734	A	20031117		
	JP 2003-386735	A	20031117		
	WO 2004-JP2894	W	20040305		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The electrolyte material has a nonfreezing water fraction (Rw1) of 20-100 in a hydrous state {Rw1 = [Wnf/(Wfc + Wnf)]; Wnf= amount of nonfreezing water per g of dry weight of polymer electrolyte material; and Wfc= amount of low m.p. water per g of dry weight of polymer electrolyte material}. The parts, the laminate, and the fuel cell use the above material. The fuel cell, using the above material, has excellent proton-conductivity and fuel cutoff properties and improved efficiency.

IPCI H01M0008-02 [ICM,7]; C08G0079-04 [ICS,7]; C08G0079-00 [ICS,7,C*]; C08G0075-02 [ICS,7]; C08G0075-20 [ICS,7]; C08G0075-00 [ICS,7,C*]; C08G0065-40 [ICS,7]; C08G0065-00 [ICS,7,C*]; H01B0001-06 [ICS,7]

IPCR C08G0065-00 [I,C*]; C08G0065-40 [I,A]; C08G0075-00 [I,C*]; C08G0075-02 [I,A]; C08G0075-20 [I,A]; C08G0079-00 [I,C*]; C08G0079-04 [I,A]; C09K0005-00 [I,C*];

C09K0005-20 [I,A]; H01B0001-06 [I,C*]; H01B0001-06 [I,A]; H01B0001-12 [I,C*];
 H01B0001-12 [I,A]; H01M0004-86 [N,C*]; H01M0004-86 [N,A]; H01M0004-88 [I,C*];
 H01M0004-88 [I,A]; H01M0004-90 [N,C*]; H01M0004-92 [N,A]; H01M0008-02 [I,C*];
 H01M0008-02 [I,A]; H01M0008-04 [I,C*]; H01M0008-04 [I,A]; H01M0008-10 [I,C*];
 H01M0008-10 [I,A]

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)

IT Fuel cell electrolytes

Fuel cells

(fuel cells containing polymer electrolyte materials with controlled
 nonfreezing water fraction for improved efficiency)

IT 7440-44-0, Carbon, uses 9002-84-0, PTFE 12779-05-4 65978-77-0D,
 sulfonated 106444-61-5D, sulfonated 108809-07-0D, sulfonated
 116875-10-6D, sulfonated 116875-11-7D, sulfonated 122159-35-7D,
 sulfonated 123349-32-6D, sulfonated 125658-29-9D, sulfonated
 132109-45-6D, sulfonated 132139-83-4D, sulfonated 136691-69-5D,
 sulfonated 146027-07-8D, sulfonated 146088-68-8D, sulfonated
 199610-91-8D, sulfonated 349672-97-5D, sulfonated
 673477-33-3D, sulfonated 758706-29-5D, sulfonated 758706-30-8D,
 sulfonated 758706-31-9D, sulfonated 758706-32-0D, sulfonated
 758706-33-1D, sulfonated 758706-34-2D, sulfonated 758706-35-3D,
 sulfonated

RL: DEV (Device component use); USES (Uses)

(fuel cells containing polymer electrolyte materials with controlled
 nonfreezing water fraction for improved efficiency)

IT 199610-91-8D, **sulfonated**

RL: DEV (Device component use); USES (Uses)

(fuel cells containing polymer electrolyte materials with controlled
 nonfreezing water fraction for improved efficiency)

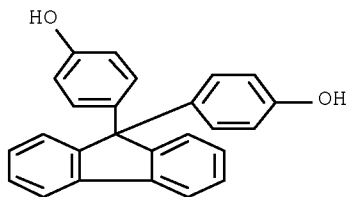
RN 199610-91-8 HCAPLUS

CN Methanone, bis(4-fluorophenyl)-, polymer with 1,3-benzenediol and
 4,4'-(9H-fluoren-9-ylidene)bis[phenol] (CA INDEX NAME)

CM 1

CRN 3236-71-3

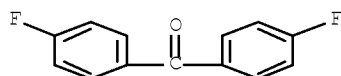
CMF C25 H18 O2



CM 2

CRN 345-92-6

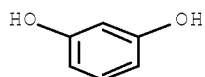
CMF C13 H8 F2 O



CM 3

CRN 108-46-3

CMF C6 H6 O2



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Dainippon Ink And Chemi	1993			JP 05-271460 A	HCAPLUS
Hatanaka, T	2002	37	59	R & D Review of Toyo	HCAPLUS
Nitto Denko Corp	2001			JP 2001294705 A	HCAPLUS
Nitto Denko Corp	2001			JP 2001294706 A	HCAPLUS
Sumitomo Chemical Co Lt	1981			JP 56-34329 B2	HCAPLUS
Toa Nenryo Kogyo Kabush	1989			JP 64-22932 A	
Tonen Corp	1996			JP 08-180891 A	HCAPLUS
Toyota Central Research	1998			JP 10-340732 A	HCAPLUS
Toyota Central Research	2002			JP 2002324559 A	HCAPLUS
University Of Southern	2001			WO 2001504636 A	
University Of Southern	2001			US 6444343 B1	HCAPLUS
University Of Southern	2001			WO 9822989 A1	HCAPLUS
Victrex Manufacturing L	2002			WO 0015691 A1	HCAPLUS
Victrex Manufacturing L	2002			WO 0119896 A1	HCAPLUS
Victrex Manufacturing L	2002			JP 2002524631 A	
Walker, M	1999	74	67	Journal of Applied P	HCAPLUS
OSC.G 3	THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)				

L68 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2011 ACS on STN

AN 1990:57030 HCAPLUS Full-text

DN 112:57030

OREF 112:9813a,9816a

TI Fully aromatic polyether-polyketone manufacture

IN Matsuo, Shigeru; Yamukai, Naoto; Kayano, Chikafumi

PA Idemitsu Kosan Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

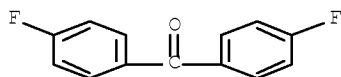
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01198624	A	19890810	JP 1988-23570	19880203
PRAI	JP 1988-23570		19880203		

AB The title polymers, with high strength and useful as engineering plastics, contain carbonyldi-p-phenylene groups, resorcinol, and other bisphenols. A copolymer of 4,4'-difluorobenzophenone, resorcinol, and hydroquinone was prepared with reduced viscosity 1.12 dL/g, glass temperature 145°, flexural strength 1390 kg/cm², flexural modulus 33,500 kg/cm², tensile strength 920 kg, and tensile modulus 27,800 kg/cm².

IPCI C08G0065-40 [ICM,4]; C08G0065-00 [ICM,4,C*]
 IPCR C08G0065-00 [I,C*]; C08G0065-40 [I,A]
 CC 35-5 (Chemistry of Synthetic High Polymers)
 IT 124949-91-3P 124949-92-4P 124949-93-5P 124949-94-6P
 124949-95-7P 124949-96-8P 124949-97-9P
 RL: PREP (Preparation)
 (heat-resistant, with good strength, preparation of)
 IT 124949-92-4P 124949-97-9P
 RL: PREP (Preparation)
 (heat-resistant, with good strength, preparation of)
 RN 124949-92-4 HCAPLUS
 CN Methanone, bis(4-fluorophenyl)-, polymer with 1,3-benzenediol and
 1,4-benzenediol (9CI) (CA INDEX NAME)

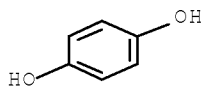
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CRN 345-92-6
 CMF C13 H8 F2 O



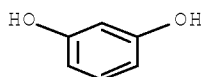
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CRN 123-31-9
 CMF C6 H6 O2



CM 3

CRN 108-46-3
 CMF C6 H6 O2

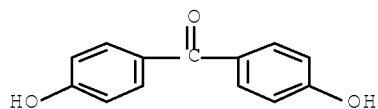


RN 124949-97-9 HCAPLUS
 CN Methanone, bis(4-fluorophenyl)-, polymer with 1,3-benzenediol and
 bis(4-hydroxyphenyl)methanone (CA INDEX NAME)

CM 1

CRN 611-99-4

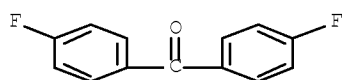
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CM 2

CRN 345-92-6

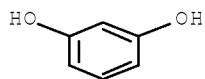
CMF C13 H8 F2 O



CM 3

CRN 108-46-3

CMF C6 H6 O2



=> d his

(FILE 'HOME' ENTERED AT 08:30:31 ON 08 FEB 2011)

FILE 'HCAPLUS' ENTERED AT 08:30:45 ON 08 FEB 2011

L1 1 S US20070269700/PN OR (US2007-551576 OR WO2004-GB1401 OR GB2003
 E CHARNOCK/AU
 L2 10 S E52-E53,E55-E56
 E DEVINE/AU
 E DEVINE J/AU
 L3 48 S E3,E10,E35,E42,E43
 E WILSON/AU
 L4 7 S E3
 E WILSON B/AU
 L5 611 S E3-E30
 E WILSON BRIAN/AU
 L6 340 S E3-E22
 E VITREX/CO
 E VICTREX/CO
 L7 71 S VICTREX?/CO,PA,CS
 E E9+ALL

E E1+ALL
 L8 50 S E2,E3/CO,PA,CS
 L9 1 S L1 AND L2-L8
 SEL RN

FILE 'REGISTRY' ENTERED AT 08:34:56 ON 08 FEB 2011

L10 4 S E1-E4
 E C6H6O2/MF
 L11 33 S E3 AND 1 46.150.18/RID AND 1/NR AND 1 3
 L12 1 S L11 AND 1,3-BENZENEDIOL/CN
 E C6H6S2/MF
 L13 8 S E3 AND 1 46.150.18/RID AND 1/NR
 L14 1 S L13 AND 1,3-BENZENEDITHIOL/CN
 E C6H6OS/MF
 L15 10 S E3 AND 1 46.150.18/RID AND 1/NR
 L16 1 S L15 AND PHENOL, 3-MERCAPTO-/CN
 L17 3 S L12,L14,L16
 L18 2353 S (40248-84-8 OR 626-04-0 OR 108-46-3)/CRN AND PMS/CI
 E "(C6H4OS)N"/MF
 E POLYETHER/PCT
 L19 520 S L18 AND E3,E4
 E POLYSULFONE/PCT
 L20 92 S L18 AND E3,E4
 E POLYKETONE/PCT
 L21 89 S L18 AND E3,E4
 L22 560 S L19-L21
 L23 320 S L22 NOT (N OR P OR SI)/ELS
 L24 240 S L22 NOT L23
 L25 1793 S L18 NOT L22
 L26 3 S L10 AND PMS/CI

FILE 'HCAPLUS' ENTERED AT 08:42:51 ON 08 FEB 2011

L27 9 S L26
 L28 468 S L23
 L29 262 S L24
 L30 6147 S L25
 L31 8 S L27 AND (PY<=2003 OR PRY<=2003 OR AY<=2003)
 L32 6 S L27,L31 AND L1-L9
 L33 9 S L27,L31,L32
 L34 7 S L33 AND H01M/IPC,IC,ICM,ICS,EPC
 L35 7 S L33 AND B01D/IPC,IC,ICM,ICS,EPC
 L36 2 S L33 NOT L34,L35
 L37 1 S L36 NOT RESIN
 L38 8 S L34,L35,L37
 L39 5184 S L28-L30 AND (PY<=2003 OR PRY<=2003 OR AY<=2003)
 L40 27 S L39 AND H01M/IPC,IC,ICM,ICS,EPC
 L41 18 S L39 AND B01D071/IPC,IC,ICM,ICS,EPC
 E CONDUCTING POLYMERS/CT
 L42 22919 S E3-E8
 E E3+ALL
 L43 26354 S E5,E6
 E E21
 E E3+ALL
 L44 6799 S E9
 E E13+ALL
 L45 12795 S E5
 E E4+ALL
 L46 20550 S E10 OR E12
 L47 29014 S E14
 E ION EXCHANGE/CT

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      E E9+ALL
L48      5349 S E8,E9,E10
L49      2785 S E12 OR E13
L50      60609 S E7
      E ION EXCHANGE/CT
      E E3+ALL
L51      33291 S E3,E5,E6
      E E13+ALL
      E BATTERY/CT
L52      76789 S E5+OLD,NT OR E7+OLD,NT OR E9+OLD,NT OR E11+OLD,NT
      E E13+ALL
L53      13948 S E2+OLD,NT OR E3+OLD,NT OR E4+OLD,NT
      E BATTERIES/CT
      E E3+ALL
L54      190718 S E1 OR E2+OLD,NT OR E3+OLD,NT OR E4+OLD,NT OR E5+OLD,NT
L55      55 S L39 AND L42-L54
L56      77 S L40,L41,L55
L57      2 S L1-L9 AND L28-L30
L58      9 S L38,L57
L59      76 S L56 NOT L58
L60      23 S L59 NOT P/DT
L61      53 S L59 NOT L60
L62      26 S L61 AND H01M/IPC, IC, ICM, ICS, EPC
L63      27 S L61 NOT L62
L64      35 S L58,L62
      SEL HIT RN

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FILE 'REGISTRY' ENTERED AT 08:57:55 ON 08 FEB 2011

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L66      8 S L65 NOT (CH2O OR C8H18O5 OR C6H7O4P OR C2H4O)

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FILE 'HCAPLUS' ENTERED AT 08:59:51 ON 08 FEB 2011

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L67      5 S L66 AND L64
L68      5 S (L39 AND L67) OR (L32 AND L31)

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